

The Claims:

1. (previously amended) A weapon effect simulation system, comprising:

a weapon comprising a fire simulation system comprising a transmitter configured to transmit electromagnetic waves from a weapon to simulate real ammunition from the weapon, and the transmitter including information in the electromagnetic waves, the fire simulation system further comprising a calculating unit configured to calculate an imagined trajectory of the simulated ammunition and a processor configured to determine a geographical position of the weapon, wherein the transmitter is operative to include in the electromagnetic waves information related to coordinates in the three-dimensional space for the calculated ammunition trajectory; and

at least one target comprising a hit simulation system comprising a receiver configured to receive the transmitted electromagnetic waves from the weapon and a processor configured to determine whether a target has been hit based on the information related to coordinates in the three-dimensional space for the calculated ammunition trajectory in the received electromagnetic waves.

2. (previously amended) The weapon effect simulation system according to claim 1, wherein the transmitter comprises a laser transmitter operative to transmit laser radiation with at least one beam lobe.

3. (previously amended) The weapon effect simulation system according to claim 2, wherein the transmitter further comprises a radio transmitter operative to transmit radio waves.

4. (previously amended) The weapon effect simulation system according to claim 3, wherein the processor is operative to determine target hits based primarily on the information in the laser radiation and secondarily on the information in the radio waves.

5. (previously amended) The weapon effect simulation system according to claim 1, wherein the transmitter comprises a radio transmitter operative to transmit radio waves.

6. (previously amended) The weapon effect simulation system according to claim 1, wherein the transmitter is operative to continuously include, based on the calculated trajectory, information concerning the current trajectory position of the simulated ammunition.

7. (previously amended) The weapon effect simulation system according to claim 1, wherein the processor is operative to include, during a period of time that is shorter than the flight time of the real ammunition and based on the calculated trajectory, information concerning the trajectory positions of the simulated ammunition.

8. (previously amended) The weapon effect simulation system according to claim 1, wherein the calculating unit is operative to determine an impact point or burst point of the ammunition, and wherein the information related to the calculated ammunition trajectory contains the impact point or burst point.

9. (previously amended) The weapon effect simulation system according to claim 1,

wherein the fire simulation system comprises a transmitter operative to transmit information regarding the geographical position of the weapon, and wherein at least one target comprises a hit simulation comprising a receiver operative to receive said position data.

10. (previously amended) The weapon effect simulation system according to claim 9, wherein the information related to the calculated ammunition trajectory is determined relative to the geographical position of the weapon.

11. (previously amended) The weapon effect simulation system according to claim 1, wherein said hit simulation system comprises a processor configured to determine the geographical position of the target.

12. (previously amended) The weapon effect simulation system according to claim 11, wherein at least one of the targets comprises a hit simulation system comprising a transmitter, and wherein the fire simulation system comprises a receiver operative to receive information from the transmitter of the hit simulation system.

13. (previously amended) The weapon effect simulation system according to claim 12, wherein the transmitter of the hit simulation system is operative to transmit information regarding the geographical position of the target.

14. (previously amended) The weapon effect simulation system according to claim 13, wherein the calculating unit is operative to determine which target has been hit, and wherein the

information related to the calculated ammunition trajectory includes information that identifies the determined target.

15. (previously amended) The weapon effect simulation system according to claim 12, wherein the transmitter of the hit simulation system is operative to transmit a hit message upon determination of a hit.

16. (previously amended) The weapon effect simulation system according to claim 15, wherein a receiver for a hit simulation system that has not determined a hit acts as a secondary object and is operative to receive the transmitted hit message.

17. (previously amended) The weapon effect simulation system according to claim 16, wherein the processor is operative to decide upon receiving hit messages whether the secondary object has been hit.

18. (previously amended) The weapon effect simulation system according to claim 15, wherein the transmitter is operatively connected with the receiver of the fire simulation system and is operative to break off the simulation upon receiving the hit message.

19. (previously amended) The weapon effect simulation system according to claim 15, wherein the fire simulation system comprises a display configured to display hit locations and effects based on received hit messages.

20. (previously amended) The weapon effect simulation system according to claim 19, wherein the display is operative to display hit locations and effects visually.

21. (previously amended) The weapon effect simulation system according to claim 1, wherein the fire simulation system is disposed at a weapon.

22. (previously amended) The weapon effect simulation system according to claim 1, wherein the processor has a geographical position that is separate from the geographical position of the transmitter.

23. (previously amended) The weapon effect simulation system according to claim 1, wherein said at least one hit simulation system is disposed in connection with a respective target.

24. (previously amended) The weapon effect simulation system according to claim 1, wherein the processor is operative to determine a hit location on the target.

25. (previously amended) The weapon effect simulation system according to claim 1, wherein the processor is operatively connected with the transmitter of the fire simulation system and operative to break off the simulation if a hit is determined corresponding to damage or injury that renders continued firing impossible.

26. (previously amended) A fire simulation system for weapon effect simulation systems, comprising:

a transmitter arranged with the weapon and configured to transmit electromagnetic waves for simulating ammunition from a weapon and for including information in the electromagnetic waves operative to include information related to coordinates in the three-dimensional space for the calculated ammunition trajectory;

a calculating unit arranged with the weapon and configured to calculate the imagined trajectory of the ammunition; and

a processor arranged with the weapon and configured to determine the geographical position of the weapon.

27. (previously amended) A method for simulating an effect of a weapon on one or more potential targets, the method comprising:

calculating with the weapon the imagined trajectory of the simulated ammunition, modulating with information electromagnetic waves for simulating ammunition from the weapon, wherein the information includes information related to coordinates in the three-dimensional space for the calculated ammunition trajectory,

transmitting from the weapon the modulated electromagnetic waves for reception by the potential targets,

making a determination with the targets upon reception of the electromagnetic waves for each respective target as to whether the target has been hit, based on the information related to coordinates in the three-dimensional space for the calculated ammunition trajectory in the received electromagnetic waves.